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2                   **METHOD FOR RECOVERING**  
3                   **MATERIALS FROM A WASTE TIRES**

4                   **ABSTRACT OF THE DISCLOSURE**

5                 A waste tire processing apparatus (10) reacts waste tires (26) with a molten reactant  
6                 metal (19) to recover primarily carbon and stainless steel. The apparatus (10) includes a tire  
7                 positioning arrangement (20) for positioning the waste tires (26) in the molten reactant metal  
8                 (19) for a reaction period. After the reaction period, the tire positioning arrangement (20)  
9                 removes from the molten metal non-reacted solids remaining after the reaction. The non-  
10                 reacted solids comprise primarily stainless-steel included in the waste tires. As the waste tires  
11                 (26) are reacted in the molten reactant metal (19), a gas recovery arrangement (14) collects  
12                 process gases released from the molten metal. The gas recovery arrangement (14) recovers  
13                 primarily carbon, metal salts, hydrogen, and nitrogen.

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